

Applicant Name Meagher County Conservation District (MCCD)
Project Name Hydrologic Investigation of the Upper Smith River Watershed, with an Emphasis on Groundwater/Surface Water Interaction

Project Abstract

This project is an investigation of the groundwater and surface water interaction within the Upper Smith River Watershed, a tributary of the Missouri River. The Smith River is an important recreational and agricultural area, located in Meagher and Cascade counties in west-central Montana. Irrigation is the cornerstone of this area's agricultural and economic well-being. Tourism is also important to the economy of the area and the State of Montana, with thousands of visitors traveling to the area annually to float and fish the nationally renowned Smith River.

MCCD has local responsibility to assess the local natural resources and to oversee their proper management. MCCD believes strongly that these decisions should be based on scientific information, not perception and/or emotion. The information from this hydrologic investigation is necessary to determine/predict the cumulative impacts that changes from wild flood irrigation to sprinkler irrigation and other water uses will have on the hydrologic system in the Upper Smith River Watershed. The investigation will also determine if use of groundwater for sprinkler irrigation is resulting in reduced flow in the Smith River. MCCD will carry out this project through a partnership with U.S. Geological Survey (USGS).

This project, a four-year study, will result in an increased understanding of the overall hydrologic system. It will help state and federal agencies, along with the concerned public, to better understand the interaction of the groundwater/surface water, an important component when determining the water allocation in the area. The ability to determine if groundwater is or is not "immediately or directly connected" to surface water is a critical component when determining the allocation of water by Montana law.

Information from this study will enhance the conservation, proper management, and development and/or preservation of a limited water resource. The information from this study will benefit agriculture, fish and wildlife habitat, associated outdoor-based recreation, and the general public. The decisions that will be made as a result of this study will benefit the people in the entire Smith River Watershed, the City of White Sulphur Springs, Meagher County, and the State of Montana through increased understanding of water resources and ability to make more informed water management decisions. The information gathered and technology used in this study may be used to help other watersheds in Montana and possibly other parts of the country.

There is a "crucial state need" to complete this project. Informed decisions and integrated water management planning regarding the future of this public resource cannot be made without scientific understanding.